

REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks. Claims 1-2, 4-6, and 8-9 were pending prior to the final Office Action. Claims 10-22 have been added to this reply. Therefore, claims 1-2, 4-6, and 8-22 are pending. Claims 1, 5, and 8 are independent.

ALLOWABLE SUBJECT MATTER

Applicants appreciate that the Examiner indicates claims 4 and 8 to be allowable. It is noted that claim 9 has been pending and is dependent on allowable claim 8. Therefore, Applicants will consider claim 9 as also being allowable.

§ 103 REJECTION – PRIMARY, SECONDARY, TERTIARY

Claims 1-2 and 5-6 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over the combination of Parulski et al. (U.S. Patent 5,828,406), Alston (U.S. Patent 4,541,010), Chang (U.S. Patent 5, 264,939), and newly cited Yamada (U.S. Patent 6,236,434). Applicants respectfully traverse.

For a Section 103 rejection to be proper, a *prima facie* case of obviousness must be established. See M.P.E.P. 2142. One requirement to establish *prima facie* case of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. See M.P.E.P. 2142; M.P.E.P. 706.02(j). Thus, if the cited references fail to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

For instance, independent claim 1 recites, in part, “a drive signal generating section for feeding horizontal and vertical drive signals to said image pickup section, and providing said horizontal drive signals with a period shorter in said particular pixel read mode than in said all pixels read mode.” The Examiner alleges Figures 5, 6A and 6B and columns 6, lines 5-68 of Parulski discloses this feature. More specifically, the Examiner alleges that horizontal clock signals H1 and H2 have a period that is shorter in the preview mode than in the still mode. See *final Office Action, page 4, third full paragraph.*

Contrary to the Examiner's allegation, Parulski cannot be so relied upon. Parulski is directed toward an electronic still camera for composing and capturing still images. Parulski discloses that the electronic camera operates in 2 modes – "motion" mode and "still" mode. *See column 4, lines 30-32.* In the motion mode, the images are processed for preview purposes. In other words, while in preview mode, the user is allowed to compose a desired scene to be photographed. *See column 3, lines 28-31.* When the user is satisfied with the composition, then the user depresses the capture button 16 to enter into the still mode to capture the still photograph.

In the Office Action, the Examiner alleges the preview mode as disclosed in Parulski is equivalent to the particular pixel read mode as claimed. Parulski discloses that in the still mode, all rows of image pixels are progressively read out, and while in the motion mode, some of the rows are eliminated. In other words, while in the motion mode, some lines of the image are skipped. But for the lines that are read, there is no difference between the reading of the rows in the still mode compared to the reading of the rows in the motion mode.

This is demonstrated in Figure 7 using the timings as shown in Figures 6A and 6B. Parulski states "as shown in Fig. 6A, first two lines (1 and 2) are read out as in the normal mode ... The next two lines (3 and 4) are eliminated ... Next, as shown in Fig. 6B, lines 5 and 6 are read out normally, and then lines 7, 8, 9, and 10 are eliminated." Clearly, since the lines that are read out occur normally, when the rows of the image is read in the motion mode, the timing remains the same. This teaches against the Examiner's allegation that the horizontal driver signals H1 and H2 have a period that is shorter in the preview than in the still mode. Thus, contrary to the Examiner's allegation, Parulski cannot be relied upon to teach or suggest the above recited feature.

Independent claim 1 also recites in part "a mode selecting section for selecting ... a particular pixel read mode for reading only the signal charges representative of the color G." The Examiner admits that Parulski cannot be relied upon to teach or suggest this feature. *See Office Action ,page 4, last paragraph.* However, the Examiner relies upon Alston to correct for this deficiency of Parulski.

Even if it is assumed that Alston does teach such a feature, Alston cannot be relied upon to correct for the deficiency of Parulski. As noted above, the Examiner alleges that the preview mode as disclosed in Parulski is equivalent to the particular pixel read mode as claimed.

Parulski indicates that in preview mode, the image to the color LCD display 10 is provided. As noted above, the image is provided by skipping some of the lines of the images and providing the remainder of the lines to the color LCD display 10. In this way, a workable image is presented to the display. Parulski states that in the preview mode, “lines of image charge that are transferred to the horizontal register 70 should preserve that particular color pattern in the pattern of lines that are generated for the line skipping read out.” See column 7, lines 9-13. Clearly, if the color pattern are to be preserved, then signal charges representative of the colors red and blue must also be provided.

This teaches away from the feature of selecting a particular read mode for reading only the signal charges representative of the color G as recited in the claim. Indeed, if Parulski is modified as suggested by the Examiner, Parulski would be rendered unsatisfactory for its intended purpose. Therefore, Parulski and Alston cannot be combined to teach or suggest the above recited feature as alleged by the Examiner.

Chang and Yamada have not been relied upon, nor can they can be relied upon, to correct for at least the above noted deficiencies of Parulski and Alston. Therefore, independent claim 1 is distinguishable over the combination of Parulski, Alston, Chang and Yamada.

Regarding independent claim 5, it is noted that claim 5 recites in part “horizontally transferring the signal charges vertically transferred at a period shorter than a period of time necessary for the signal charges to be read out in said all pixel read mode” and “selecting … a particular pixel read mode for reading only the signal charges representative of the color G.” It has been shown above that the combination of Parulski, Alston, Chang, and Yamada cannot be relied upon to teach or suggest at least these features. Therefore, independent claim 5 is also distinguishable over the combination of Parulski, Alston, Chang, and Yamada.

Claims 2 and 6 depend from independent claims 1 and 2, respectively. Therefore, for at least the reasons stated above with respect to the independent claims 1 and 5, claims 2 and 6 are also distinguishable over the combination of Parulski, Alston, Chang, and Yamada.

Applicants respectfully request that the rejection of claims 1-2 and 5-6 based on Parulski, Alston, Chang and Yamada be withdrawn.

NEW CLAIMS

Claims 10-22 have been added through this reply. All new claims are believed to be distinguishable over the cited references, individually or in any combination. For example, claims 10-15 depend from independent claim 1, claims 17-19 depend from independent claim 5, and claims 20-22 depend from independent claim 8. It is demonstrated above that independent claims 1 and 5 are distinguishable over the cited references, individually or in any combination and the Examiner admits that independent claim 8 is allowable. Thus, for at least due to the dependency thereon to the independent claims, the new claims are distinguishable over the cited references.

The new claims are also distinguishable on their own merit. For example, claim 12 recites in part “mode selecting section generating a different phase of the horizontal drive signal ... in response to a horizontal timing signal fed from said drive signal generating section and a control signal fed from said controller.”¹

In the final Office Action, the Examiner admits that Parulski does not teach or suggest this feature. *See final Office Action, page 5, last paragraph.* However, the Examiner alleges that Chang corrects for this deficiency. More specifically, the Examiner alleges that elements 37 and 32 of Figure 1 discloses horizontal drive signals selected from a plurality of signal levels in response to a horizontal timing signal.

A closer examination of Figure 1 reveals that the horizontal scan generator 32 produces 3 signals, H1A, H1B, and H2 and couples them to the CCD sensor 16 to

¹ This feature was previously recited in claim 1 prior to the amendment.

drive the shift registers 24 and 26. *See column 3, lines 50-54.* The horizontal scan generator receives as input a signal from the control system 64. *See Figure 1.*

Regarding the coupling between the horizontal scan generator 32 and the control system 64, Chang merely discloses that the control system 64 controls the horizontal scan generator 32. *See column 4, lines 2-5.* Chang is completely silent regarding what types of control signals are provided to the horizontal scan generator 32. Also regarding the scan generator 32 itself, Chang merely indicates that the scan generator 32 generates the clock signals as indicated.

However, Chang is utterly silent regarding the basis for the generation of these clock signals. Therefore, without more, Chang cannot be relied upon to teach or suggest the feature of generating a different phase of the horizontal drive signals in response to a horizontal timing signal fed from said drive signal generating section and a control signal fed from said controller as recited in claim 12. Clearly, claim 12 is distinguishable on its own merit.

As another example, claim 13 recites the feature of a horizontal signal driver that includes a first plurality of horizontal line drivers, and a second plurality of horizontal line drivers. None of the cited references provide any particulars regarding the horizontal line drivers.

For at least the reasons stated above, Applicants respectfully request that the new claims be allowed.

CONCLUSION

All objections and rejections raised in the Final Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact Hyung Sohn (Reg. No. 44,346), to conduct an interview in an effort to expedite prosecution in connection with the present application.

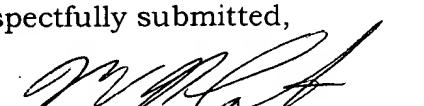
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants respectfully petition for a one (1) month extension of time for filing a response in connection with the present application and the required fee of \$120 is being filed concurrently herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By


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Attachments: Two (2) sheets of corrected Formal Drawings

AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) sheets of corrected formal drawings. The drawing corrections incorporate the following changes:

First, in Figure 3, outputs of the mode adaptive selector is relabeled to show the signals outputted depending on the settings of the switches S10, S12, S14 and S16 to enhance consistency with the specification.

Figures 5E, 5F, and 5G are amended to enhance consistency with the specification as well as to correct for a minor typographical error.